

Appl. No. 09/611,144
Amdt. dated June 19, 2003
Reply to Office action of March 26, 2003

BJA170A

JUN 21 2003

GROUP 3700

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

- 1.(currently amended) An active endoscopic PhotoDynamic Therapy (PDT) comprising:
 - a distal and a proximal end;
 - a radiation source positioned at said distal end;
 - means to homogenize/scatter radiation from said source;
 - wherein said source provides a diffuse radiation pattern across a section of body tissue, which is large compared to said endoscopic device's distal cross section, and which is in proximity to said distal end; and
 - wherein said radiation source is powered remotely and operates at a pre-selected wavelength and power range compatible with requirements of a selected PDT drug.
2. An active endoscopic device according to claim 1, wherein said radiation source is a multitude of diodes mounted on said device's distal end so as to create an illumination pattern to effectively irradiate a selected treatment site.
3. An active endoscopic device according to claim 2, wherein said diodes are diode lasers.
- 4.(previously amended) An active endoscopic device according to claim 3, wherein said diode lasers comprise lasers operating at different wavelengths.
5. An active endoscopic device according to claim 1, wherein said radiation source is provided by chemiluminescence.
6. An active endoscopic device according to claim 1, further comprising cooling means.
7. An active endoscopic device according to claim 1, further comprising means to deliver a substance which will be activated by said radiation.
8. (previously cancelled)
9. An active endoscopic device according to claim 1, further comprising at least one balloon to serve as a centering mechanism.
- 10.(currently amended) An active endoscopic device according to claim 9, wherein [a] said homogenizing means is a partially reflective coating on said at least one balloon.

Appl. No. 09/611,144
Amdt. dated June 19, 2003
Reply to Office action of March 26, 2003

BJA170A

11.(currently amended) A method of performing PhotoDynamic Therapy with an active endoscopic device [such] as in claim 1, comprising the steps of:

positioning a catheter/endoscope into a patient and directing it to a predetermined treatment site within said patient;

placing said active endoscopic device into said endoscope/catheter and advancing it so that its distal end with its radiation source and means to homogenize/scatter its radiation are at a distal end of said endoscope; and

energizing said radiation source and irradiating said selected treatment site for times and periods to achieve said PDT treatment for said selected treatment sites.

12.(new) An active endoscopic device according to claim 2, wherein said homogenizing means is a partially reflective film over said multitude of diodes.